

SECTION 03200: CONCRETE REINFORCEMENT

PART 1 – GENERAL

1.01 REFERENCE STANDARDS

Conform with requirements of the following Reference Standards as the Engineer judges them applicable and as modified and supplanted herein.

- A. ACI Building Code Requirements for Reinforced Concrete, ACI 318
- B. ACI Specifications for Structural Concrete for Buildings, ACI 301
- C. ACI Detailing Manual, ACI 315

1.02 QUALITY ASSURANCE

Special Inspection: Notify the Engineer at least 48 hours before placing any concrete in accordance with Section 03100.

1.03 SUBMITTALS

Product Data: Submit manufacturers' published literature for specified products and accessories as applicable, including manufacturers' Specifications, physical characteristics, and performance data. Submit as a supplement, manufacturers' instructions, and directions for application if not included in manufacturers' published literature.

PART 2 –PRODUCTS

2.01 MATERIALS

- A. Bars: ASTM A615 (including Supplement S1); Grade 60, $F_y=60,000$ psi sizes as indicated and noted on Drawings; all bars shall be free from rust and loose scale at time of installation.
- B. Tie wire: 16-gauge double annealed wire. Provide galvanized tie wire for exposed concrete.

PART 3 –EXECUTION

3.01 FABRICATION AND DETAILING

- A. Fabricate steel bar reinforcement to shapes and dimensions as shown and placed as indicated.
- B. Bending and Straightening: Form bars accurately to detail, other kinks or bends will not be permitted; conform with requirements of ACI 318. Make bends cold around pin with diameter at least six times bar dimension; heating of reinforcement will be permitted only if entire operation is approved. No bending of reinforcement after partial embedment in concrete will be permitted, unless approved by the Engineer.
- C. Splices: Obtain approval of all splices not indicated on Drawings. In general avoid splices at points of maximum stress. Saw, shear or flame-cut bar ends; straighten ends of sheared bars; chip and wire brush ends of flame-cut bars. Wire brush splice area to remove burrs, paint, oil, and other foreign matter before splicing.

3.02 PLACEMENT

- A. Clean reinforcing bars free from loose rust, mud, oil and other foreign matter affecting or reducing bond using approved portable sandblasting equipment. Accurately position bars in accordance with approved placement Drawings and secure against displacement. Lap at intersections as indicated or as directed; extend reinforcement through, and lap beyond, construction joints.
- B. Displacement: If bars are displaced, or if it is necessary to move bars to avoid interference with other reinforcing or embedded items, and if bars are moved to exceed tolerances, obtain approval of resulting arrangement prior to placing concrete.

DIVISION 3 — CONCRETE

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- C. Miscellaneous: After cutting tie-wire, turn wires to the inside of the section and bend in such manner that concrete placement will not force ends to exposed concrete surfaces.
- D. Contact Engineer at a minimum of 48 hours before placing concrete to review reinforcing

END OF SECTION 03200